

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Tatsuo Fukushi

Serial No.: 10/659877
Filed: September 11, 2003
For: FLUOROELASTOMERS WITH
IMPROVED PERMEATION
RESISTANCE AND METHOD FOR
MAKING THE SAME

Group Art Unit: 1713

Examiner: Henry S. Hu

AFFIDAVIT UNDER 37 C.F.R. 1.132

AFFIDAVIT OF DR. WERNER M. GROOTAERT

STATE OF MINNESOTA)
) ss.
COUNTY OF WASHINGTON)

Werner M. Grootaert, being duly sworn, deposes and says:

I.

1. That I received a Licenciante in Science from the State University of Gent, Belgium, in 1980.
2. That I received a Doctorate Degree in Chemistry from the State University of Gent, Belgium, in 1986.
3. That from May, 1986 to the present, I have been employed by 3M in Antwerp, Belgium, subsequently at 3M in Maplewood, Minnesota, and by Dyneon, LLC.
4. That I currently hold the position of Lead Senior Specialist with Dyneon LLC.
5. That I am a named inventor on U.S. Patent No. 6,730,760 B2 issued May 4, 2004.

II.

6. That in order to evaluate the materials similar to the subject matter of the '760 patent, I instructed others to measure the TR-10 of several fluorocarbon polymer compounds. The TR-10 was measured according to ASTM D 1329-88 (Re-approved 1998) with ethanol as the cooling media.

7. That the following data correspond to samples of fluorocarbon polymers similar in composition to those described in the '760 patent. I instructed others to measure the TR-10 of several fluorocarbon polymer compounds. The TR-10 was measured according to ASTM D 1329-88 (Re-approved 1998) with ethanol as the cooling media. For reference, the monomer compositions of the fluorocarbon polymers described in Examples 4, 5, and 7 are also provided in the table.

Sample ID		LM9/688	LM9/692	LM9/693	LM9/701	Example 4	Example 5	Example 7
Relative Monomer Content ¹	TFE	71.5	73	74.1	67.7	73	68	78
	MV31	20.4	18.8	17.9	19.5	17	19	21
	PMVE	8.1	8.3	8	12.8	9	12	--
	CSM ²	1	1	1	1	1	1	1
Tg (°C)		-20	-18	-19	-20	-16	-19	-20
TR-10 (°C)		-15.4	-16	-12.9	-15.1	Not Measured	Not Measured	Not Measured

1 Measured by FT-NMR, reported in mol %

2 Relative amount of cure site monomer fed into reactor (CSM was bromotrifluoroethylene)

8. That to the best of my knowledge and belief, based upon the data provided in this affidavit, none of the Examples described in the '760 patent have the characteristics such that upon vulcanization the resulting compound would be expected to have a TR-10 of -25°C or less.

Further affiant saith not.

Printed Name: Werner M. Grootaert

Signature: 

Subscribed and sworn to before me this 3rd day of February, 2006.


Notary Public

